



# Recommendations to Improve Pedestrian & Bicycle Safety for the Mission District of the City of San Gabriel



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Berkeley SafeTREC

SAFE TRANSPORTATION RESEARCH AND EDUCATION CENTER

# Recommendations to Improve Pedestrian & Bicycle Safety for the City of San Gabriel

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## Introduction

At the invitation of Bike San Gabriel Valley, the University of California at Berkeley's Safe Transportation Research and Education Center (SafeTREC) and California Walks (Cal Walks) facilitated a community-driven pedestrian and bicycle safety action-planning workshop in the City of San Gabriel to improve pedestrian safety, bicycle safety, walkability, and bikeability in and around the Mission District of San Gabriel.

Prior to the workshop, Cal Walks staff conducted an in-person site visit on Friday, August 18, 2017, to adapt the Community Pedestrian and Bicycle Safety Training program curriculum to meet the local communities' needs and to provide context-sensitive example strategies for the community's existing conditions. Cal Walks facilitated the workshop on Monday, September 25 from 4:00 pm to 8:00 pm which consisted of: 1) an overview of multidisciplinary approaches to improve pedestrian and bicycle safety; 2) one walkability and bikeability assessment along a key route; and 3) small group action-planning discussions to facilitate the development of community-prioritized recommendations to inform San Gabriel's active transportation efforts. This report summarizes the workshop proceedings, as well as ideas identified during the process and recommendations for pedestrian and bicycle safety projects, policies, and programs.

## Background

### Community Pedestrian and Bicycle Safety Training Program

The Community Pedestrian and Bicycle Safety Training (CPBST) program is a joint project of UC Berkeley SafeTREC and Cal Walks. Funding for this program is provided by a grant from the California Office of Traffic Safety (OTS) through the National Highway Traffic Safety Administration (NHTSA). The purpose of the CPBST program is to train local neighborhood residents and safety advocates on how to improve pedestrian and bicycle safety and to strengthen their collaboration with local officials and agency staff to make communities safer and more pleasant to walk and bike. For each training, the program convenes a multi-sector, multi-disciplinary local planning committee to tailor and refine the training's curriculum and focus to meet the community's needs. Additionally, Cal Walks staff conduct pre-training site visits to collect on-the-ground observations of existing walking and biking conditions to inform the training's scope and focus.

The half-day training is designed to provide participants with both pedestrian and bicycle safety best practices and a range of proven strategies (the 6 E's: Empowerment & Equity, Evaluation, Engineering,

Enforcement, Education, and Encouragement) to address and improve pedestrian and bicycle safety conditions and concerns. Participants are then guided on a walkability and bikeability assessment of nearby streets before setting pedestrian and bicycle safety priorities and actionable next steps for their community.

For a summary of outcomes from past CPBST workshops, please visit: [www.californiawalks.org/projects/cpbst](http://www.californiawalks.org/projects/cpbst) and <https://safetrec.berkeley.edu/programs/cpbst>

## Selected Pedestrian & Bicycle Safety Conditions in San Gabriel

### High Speeds & Wide Streets

While the posted speed limits along Mission Road and Las Tunas Drive, two main arterials, are 40 and 35 miles per hour (MPH), respectively, the width of the street and travel lanes are documented to encourage drivers to travel at higher speeds. Research has demonstrated that wide streets and wide travel lanes are associated with higher vehicle speeds,<sup>1</sup> which affect the safety of people walking and bicycling. These roads are characterized by two lanes in each direction with a striped centerline or striped left turn lane to allow for vehicle turns without impeding traffic flow. During the site visit, Cal Walks staff observed bicyclists riding on the sidewalk, likely due to the lack of bicycle lanes and their lack of comfort with traveling next to fast moving vehicles.



Mission Road is a wide multi-lane road with high speeds. Sidewalks are located on the north side.

### Inadequate Lighting

A lack of pedestrian-scale lighting was observed in and around the Mission District. Pedestrian-scale lighting exists along segments of Mission Road, Mission Drive, Santa Anita Street, Broadway, and Junipero Serra Drive, but pedestrian-scale lighting is missing in critical locations near schools and parks, for example, along Santa Anita Street between Mission Drive and Broadway. Existing pedestrian-scale lighting and street lights appeared to be sodium vapor lamps, which emit dim a yellow-orange light that can impact nighttime visibility for pedestrians of their surroundings, as well as of other pedestrians, including facial recognition. The dim lighting and reduced visibility can reduce the perception of safety, compared to newer LED varieties.

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<sup>1</sup> See Kay Fitzpatrick, Paul Carlson, Marcus Brewer, and Mark Wooldridge, "Design Factors That Affect Driver Speed on Suburban Arterials": Transportation Research Record 1751 (2000):18–25.



Pedestrian-scale lighting along Mission Road have burned out bulbs and emit a dim, yellow-orange light.



A bicyclist rides along cracked, uneven asphalt near the Mission.

**Poor Roadway Conditions**

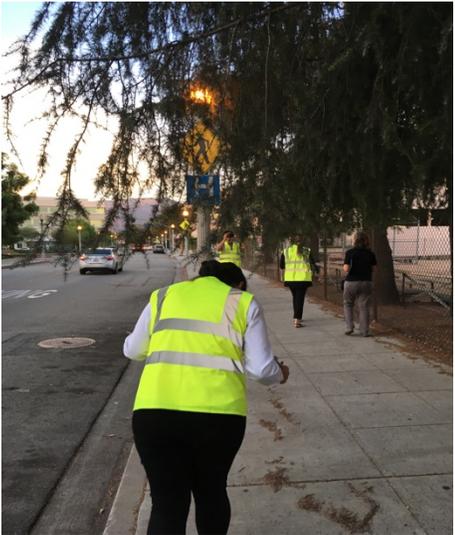
During the site visit, Cal Walks staff observed poor roadway conditions, including cracked and uneven asphalt, potholes, and faded road markings and crosswalks along Mission Road and adjacent residential streets. Uneven pavement and faded road markings were observed on Broadway along San Gabriel Mission High School. It appears that a long, narrow strip has been recently repaved while the rest of the roadway has not been, creating a raised lip along the roadway shoulder where bicyclists ride.

**Overgrown Landscaping**

Overgrown landscaping, including tree foliage, was observed along Mission Road, Mission Drive, Broadway, and Santa Anita Street. In several locations, overgrown tree canopies blocked directional and wayfinding signage, sidewalks, and pedestrian-scale lighting, impacting nighttime visibility.



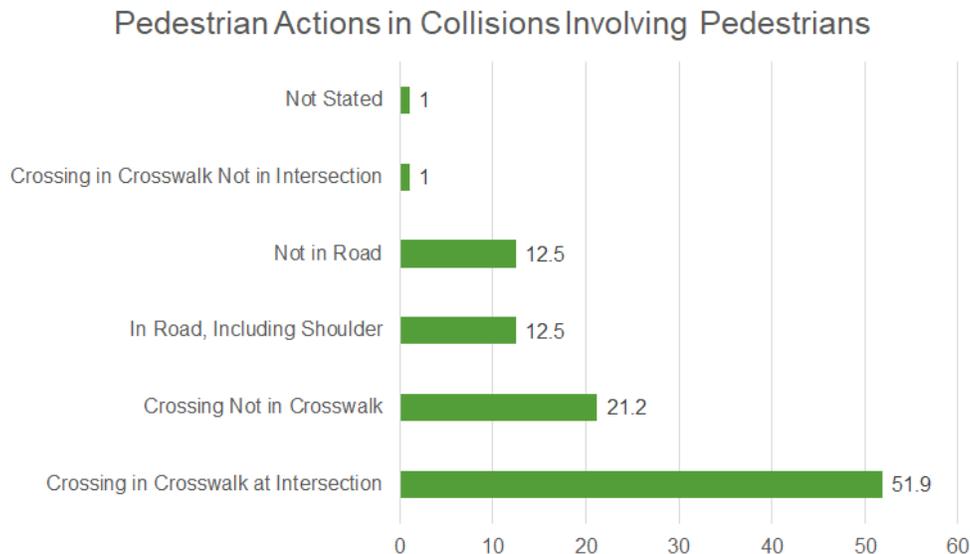
Uneven pavement along Broadway, across from San Gabriel Mission High School.



Overgrown tree foliage obscures the street light and impacts pedestrian access.

## Pedestrian & Bicycle Collision History

Between 2011-2015,<sup>2</sup> there were 104 pedestrian collisions, including 5 fatalities and 20 severe injuries in San Gabriel, with collisions concentrated along Las Tunas Drive, Valley Boulevard and Del Mar Avenue. The top three primary collision factors for pedestrian collisions in San Gabriel were a driver failing to yield the right-of-way to a pedestrian in a marked or unmarked crosswalk (39.4%) and a pedestrian failing to yield the right-of-way to a driver when crossing outside a crosswalk (15.4%).<sup>3</sup> Over the 10-year period between 2006-2015, pedestrian collisions appear to be on an upward trajectory.



Between 2011-2015, there were 119 bicycle collisions, including 4 severe injuries in San Gabriel, with collisions concentrated on Las Tunas Drive, Valley Boulevard and Del Mar Avenue. The top two primary collision factors for bicyclist collisions in San Gabriel were bicyclists riding on the wrong side of the road (31.9%) and a bicyclist failing to yield the right-of-way to a driver (20.2%). Over the 10-year period between 2006-2015, bicycle collisions appear to be on a downward trajectory.

A full discussion of the pedestrian and bicyclist collision data prepared by UC Berkeley SafeTREC can be found Appendix A.

## September 25, 2017 Workshop

Bike San Gabriel Valley requested a workshop to 1) provide San Gabriel Mission and City staff, community organizations, and residents with a toolkit for promoting pedestrian and bicycle safety to inform future active transportation projects; 2) strengthen working relationships between Bike San Gabriel Valley, the San Gabriel Mission, the City and other stakeholders to ensure the best outcomes

<sup>2</sup> Please note 2014 and 2015 data is provisional.

<sup>3</sup> Pedestrians have the right-of-way in marked and unmarked crossings, and drivers are legally required to yield to pedestrians in these instances. However, when pedestrians cross outside of marked or unmarked crossings, pedestrians must yield the right-of-way to drivers. A pedestrian is legally able to cross outside of a marked or unmarked crossing between two intersections where one or none of the intersections is signalized but only if the pedestrian yields the right-of-way to oncoming drivers. This is not the same as the term “jaywalking,” which refers to crossing outside of a marked or unmarked crossing between two signalized intersections.

for the residents of San Gabriel; and 3) develop consensus regarding pedestrian and bicycle safety priority and actionable next steps.

The workshop was hosted from 4:00 pm to 8:00 pm, and dinner and simultaneous interpretation from English to Spanish were provided to maximize community participation. Nine (9) individuals attended the workshop, including residents and representatives from the City of San Gabriel and Bike San Gabriel Valley. The presence of local organizations will help to expand the reach of the workshop.

## Reflections from Walkability & Bikeability Assessment

Workshop participants conducted walkability and bikeability assessments along a key route. Participant traveled west on Mission Avenue from the San Gabriel Mission, north on the east side of Santa Anita Street and south on the west side of Santa Anita Street, and east on Mission Avenue to the Mission. Assessment participants focused on crossing and lighting conditions along Santa Anita Street, as well as, comfort and safety for pedestrians and bicyclists during evening hours.

Participants were asked to 1) observe infrastructure conditions and the behavior of all road users; 2) apply strategies learned from the 6 E's presentation that could help overcome infrastructure concerns and unsafe driver, pedestrian, and bicyclist behavior; and 3) identify positive community assets and strategies which can be built upon.

Following the walkability and bikeability assessment, the participants shared the following reflections:

- **Poor Sidewalk Conditions and Accessibility Challenges:** Participants noted that sidewalks in the Mission District are continuous; however, many sections along Mission Drive, Santa Anita, and several walking paths within the Mission are narrow, cracked, and uneven. There are several decorative tiles on sidewalks along Mission Drive that have raised above the sidewalk due to temperature changes, creating an uneven surface and tripping hazard for pedestrians.



A cracked and uneven pedestrian walkway within the San Gabriel Mission.



A missing sidewalk at 113 S Santa Anita Street near the intersection of Las Tunas Drive.



A raised decorative sidewalk tile along Mission Drive creates a tripping hazard.

Sidewalks along Santa Anita Street between Mission Drive and Las Tunas Drive vary in texture, width, and condition. Between Mission Drive and Broadway, portions of the sidewalk are extremely narrow and appear to be slanted beyond the maximum recommended cross slope of

2%. These conditions impact access for parents with strollers and people with limited mobility devices. Sidewalks along much of Santa Anita Street are sufficiently wide and allow two adults to walk side-by-side and pass comfortably. On the west side of Santa Anita Street near the Las Tunas Drive intersection (113 S. Santa Anita Street), the sidewalk zone is flush with the parking lot and driveway, which also appears to be sloped beyond the maximum recommended slope.

- **Wide Roads & High Speeds:** Participants noted that vehicles travel at high speeds in the Mission District, especially on Santa Anita Street, Mission Road, Las Tunas Drive, and Del Mar Avenue. Even along smaller streets like Junipero Serra Drive—with a posted speed limit of 30 miles per hour (MPH) and Broadway, Mission Drive, and Santa Anita Street—with a posted speed limit of 25 miles per hour (MPH) and located near schools, a park, and hospital—participants felt that drivers were exceeding the speed limit.

When selecting the walkability and bikeability assessment route, several participants requested not to walk along Del Mar Avenue and Las Tunas Drive because of unsafe vehicle speeds during rush hour traffic. Participants were also concerned with crossing any major arterial during rush hour due to vehicle speeds and inattentive drivers.

- **Lighting Challenges & Opportunities:** Participants noted that many areas of the Mission District are unlit at night by a lack of street and pedestrian-scale lighting. Although there are sections of streets with pedestrian-scale lighting, the light fixtures are not consistently placed, and they do not provide sufficient light to illuminate the sidewalk and bicycling zone, partly due to burned out bulbs, overgrown vegetation blocking light fixtures, and the yellow-orange light that is emitted by the fixtures. Participants acknowledged the presence of well-placed, even pedestrian-scale lighting in some areas of the Mission District and saw an opportunity to replicate lighting infrastructure in other areas of the District and throughout the City.
- **Lack of Signage:** Participants noted a lack of signage in the Mission District including speed limit, school zone, and wayfinding signs. Participants admired the celebrated entryway into the Mission District on Mission Drive and Mission Road but noted that a similar style entryway is lacking on Santa Anita Street and Las Tunas Drive. Participants believed the lack of a celebrated entryway might be one of the reason for higher speeds along Santa Anita Street since there is little in the environment to signal to motorists of a change in neighborhood. Participants also noted that additional speed limit and school zone signage is needed along Santa Anita Street.
- **Driver Behaviors at Stop Signs:** Participants expressed concern over driver behavior at stop signs in the Mission District in particular but also and citywide. They noted that many drivers do not obey stop signs within the Mission District and surrounding neighborhood, including along Broadway and Junipero Serra Drive near Smith Park and along Mission Drive near the Mission. Drivers tend to roll through stop signs and fail to yield the right-of-way to pedestrians in a marked or unmarked crosswalk.
- **Landscaping & Placemaking Elements:** Assessment participants noted several unique placemaking elements in the Mission District, including the historic San Gabriel Mission and San Gabriel Mission Playhouse buildings, the unique Mission-themed sidewalk design and tiles, and landscaping including large historic trees and unique cacti that create unique zones within the District. Participants hoped to extend these artistic, placemaking, and wayfinding elements into other parts of the Mission District to help identify the Mission District to visitors and draw more people to the Mission and businesses along Mission Drive.

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A celebrated entry on Mission Drive and Mission Road and several existing placemaking elements.

## Community Resident Recommendations

Following the walkability and bikeability assessment, Cal Walks facilitated small-group action planning discussions. Workshop participants discussed two sets of questions: the first set of questions focused on prioritizing non-infrastructure improvements, while the second set focused on identifying locations for pedestrian and bicycle safety improvements to reduce the number of pedestrian and bicyclists injuries and fatalities.

Workshop participants provided the following recommendations for overall pedestrian and bicyclist safety improvements:

### *Non-Infrastructure Priorities & Recommendations*

- **Walk- & Bike- Themed Community Events:** Participants expressed a desire to cultivate a stronger sense of community in the Mission District through community events such as open streets events, community walking groups, community races, and more community meetings to

discuss pedestrian and bicyclist safety needs. Participants noted there are existing opportunities to build off, such as the community events held at the Mission and the City's Walk to LA summer event.

- **Community Education Campaigns:** Participants felt strongly that focused roadway safety education is needed for drivers, pedestrians, bicyclists, seniors, and students. Participants prioritized education for drivers focused on pedestrian rights at marked and unmarked crossings and bicyclists' right to use the full lane. Participants also recommended community bicycle classes to educate bicyclists on the rules of the road and how to navigate conflict zones. The San Gabriel Mission, Bike San Gabriel Valley, the Department of Motor Vehicles (DMV), schools, and the Police Department were identified as potential education partners.
- **San Gabriel Mission Celebrated Entry on Santa Anita Street:** Participants discussed the installation of a celebrated entry way on Santa Anita Street and Las Tunas Drive to signal to visitors they are entering the Mission District. The streetlight banners found along Mission Drive could also serve as an additional placemaking element along Santa Anita Street.

### *Infrastructure Priorities & Recommendations*

- **Sidewalk Infill:** Participants noted that although small portions of the Mission District are in need of sidewalk infill projects, larger portions of east San Gabriel are in need of sidewalks, particularly around schools. Participant recommend that these areas receive priority over others in the City.
- **Crossing Enhancements:** Marked crosswalks vary in type and condition in the Mission District. Some crosswalks are high-visibility and include yellow-green fluorescent pedestrian crossing signage while the majority are standard transverse markings. Participants prioritized crossing improvements along Broadway, Santa Anita Street, and Junipero Serra Drive. Due to drivers disobeying stop signs, participants recommended updated stop signs and crossings to draw the attention of drivers. They also prioritized installation of high-visibility crossings near all schools in the Mission District. Currently, there are high-visibility crossings at the Mission Drive entrance into the Mission District, but they are not found throughout the Mission District and at intersections near schools and hotels where there are likely to be large volumes of pedestrians.



Left: Current ADA standard curb ramps. Right: Older, concrete curb ramps.

- **Bicycle Infrastructure Improvements:** Although there are bike lanes and bike route signage along some City streets, participants prioritized bicycle infrastructure improvements along the eastern and southern portions of the City, especially along Valley Boulevard. Participants noted there are significant gaps in bicycle infrastructure, including bicycle lanes and wayfinding signage in east San Gabriel near Temple City, especially along San Gabriel Boulevard. Participants who biked on a regular basis preferred to travel along Del Mar Avenue rather than San Gabriel Boulevard.
- **Valley Boulevard Infrastructure Improvements:** Participants identified Valley Boulevard as a priority area for overall infrastructure improvements, including restriping, bicycle facilities, and enhanced crossings due to existing roadway conditions, the need for pedestrian and bicycle safety infrastructure, and the high number of pedestrians and bicyclists that travel along the arterial to commercial shopping and dining areas and transit stops.

## California Walks/SafeTREC Recommendations

California Walks and SafeTREC also submit the following recommendations for consideration by the City of San Gabriel, the San Gabriel Mission, Bike San Gabriel Valley, and other community non-profits:

- **Traffic Calming Measures:** Cal Walks and SafeTREC recommend traffic calming measures along Mission Drive/Junipero Serra Drive, Las Tunas Drive, Santa Anita Street, and Del Mar Avenue, including, where appropriate, a road diet, bicycle facilities, curb extensions, enhanced crossings, and pedestrian refuge islands, which can reduce drivers' speed and improve safety for people who walk and bike. We recommend the City of San Gabriel collaborate with community organizations, like the Mission, Bike San Gabriel Valley, and residents to secure funding through the Caltrans Sustainable Transportation Planning Grant program to develop a comprehensive Complete Streets plan for Valley Boulevard to identify priority improvement projects to improve conditions and safety for all road users.
- **Accessibility Improvements:** Sidewalk and curb ramp designs and conditions varied throughout the Mission District. The majority of intersections have no curb ramps or older concrete ramps that do not conform to current Americans with Disabilities Act (ADA) standards and best practices. Some curb ramps are concrete apex ramps that directed pedestrians into the intersection rather than directly into the marked or unmarked crosswalk.

Sidewalks along Mission Drive are made of a decorative textured surface that can make it more difficult for people with limited mobility to navigate. Raise surfaces can increase resistance for people traveling with a mobility assistance device or create gaps where mobility assistance devices can catch. We recommend using a smooth surface and using colored or stamped concrete or trim to designate a specific District. We recommend the City create an ADA transition plan specifically for the Mission District to prioritize ADA improvements, including sidewalk slope adjustments and curb ramps updates.

- **Bicycle Connectivity, Signage, & Wayfinding:** Although bicycle lanes and bike route signage are present in other areas of the City, Cal Walks staff did not observe any bicycle lanes in the Mission District. Bicycle facilities along Santa Anita Street and Mission Road near the Mission are recommended to ensure safety for bicyclists traveling in and through the District. We also recommend that bicycle signage be designed to correlate with existing Mission District wayfinding signage to further identify the Mission District to visitors.

## Acknowledgments

We would like to thank Andrew Yip of Bike San Gabriel Valley for inviting us into the community and Father Diaz from the San Gabriel Mission and Algis Marciuska from the City of San Gabriel and for hosting the Community Pedestrian and Bicycle Safety Training.

We would like to acknowledge the many community members and agencies present at the workshop and their dedication to pedestrian and bicycle safety. Their collective participation meaningfully informed and strengthened the workshop's outcomes.

Funding for this program was provided by a grant from the California Office of Traffic Safety through the National Highway Traffic Safety Administration.

# **Appendix A**

## **Pedestrian and Bicycle Collision Data Analysis**

# Community Pedestrian and Bicyclist Safety Workshop – San Gabriel, CA – 09/25/17

## Pedestrian and Bicycle Collision Analyses, 2006-15\*

### PEDESTRIANS

#### Number of Collisions Involving Pedestrians, 2006-15



The **blue** line shows the number of pedestrian collisions where a fatality and/or injury occurred. There were 223 people injured or killed in 198 pedestrian collisions over the last 10 years.

The **green** line shows the three-year moving average of the number of pedestrian collisions where a fatality and/or injury occurred. The moving average is useful for tracking trend change over time, especially when the number of collisions is subject to variability. Data points are the midpoint of the three years of data specified.

The following analyses are based on the most current five years, 2011 to 2015, of data for San Gabriel, CA. There were 119 people killed or injured in 104 pedestrian collisions.

#### Top Violation Types for Collisions Involving Pedestrians

| Type of Violation   | Collisions N (%)    |
|---|---------------------|
| Driver must yield pedestrian right of way in a crosswalk                | 41 (39.4%)          |
| Pedestrian yield, upon roadway outside crosswalk                        | 16 (15.4%)          |
| Unsafe speed for prevailing conditions (use for all prima facie limits) | 7 (6.7%)            |
| Unsafe turn with/without signaling                                      | 6 (5.8%)            |
| Starting or backing while unsafe  | 4 (3.8%)            |
| Other violation   | 30 (28.9%)          |
| <b>Total</b>  | <b>104 (100.0%)</b> |

#### Pedestrian Actions in Collisions Involving Pedestrians

| Pedestrian Action                         | Collisions N (%)    |
|---|---------------------|
| Crossing in Crosswalk at Intersection     | 54 (51.9%)          |
| Crossing Not in Crosswalk                 | 22 (21.2%)          |
| In Road, Including Shoulder               | 13 (12.5%)          |
| Not in Road                               | 13 (12.5%)          |
| Crossing in crosswalk not in intersection | 1 (1.0%)            |
| Not stated                                | 1 (1.0%)            |
| <b>Total</b>                              | <b>104 (100.0%)</b> |

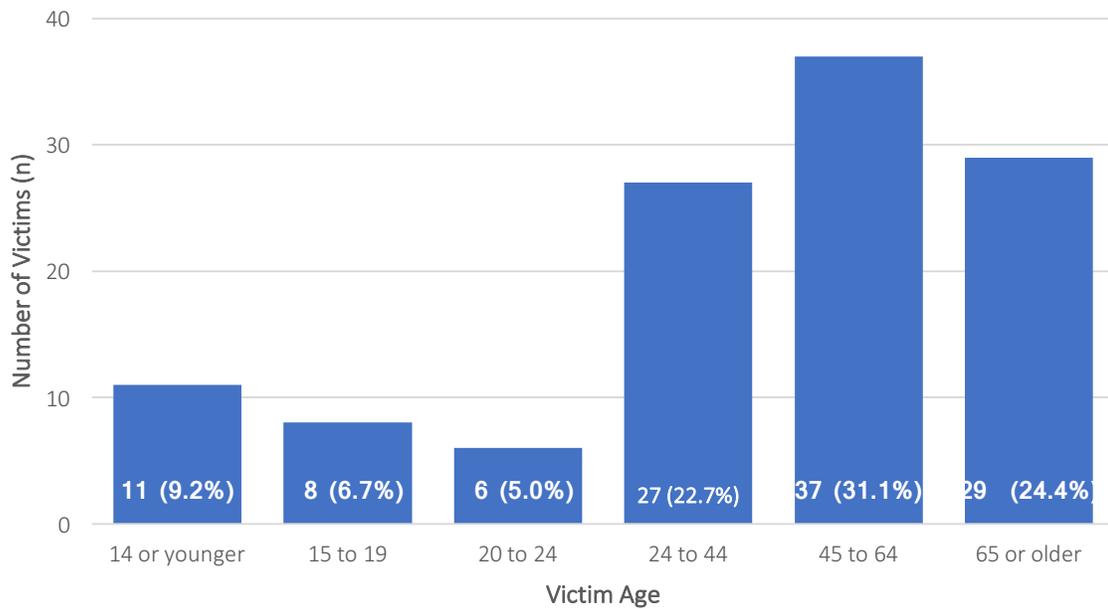
\* Data Source: California Statewide Integrated Traffic Records System (SWITRS). Collision data for 2014 and 2015 are provisional at this time.

# Community Pedestrian and Bicyclist Safety Workshop – San Gabriel, CA – 09/25/17

## Pedestrian and Bicycle Collision Analyses, 2006-15\*

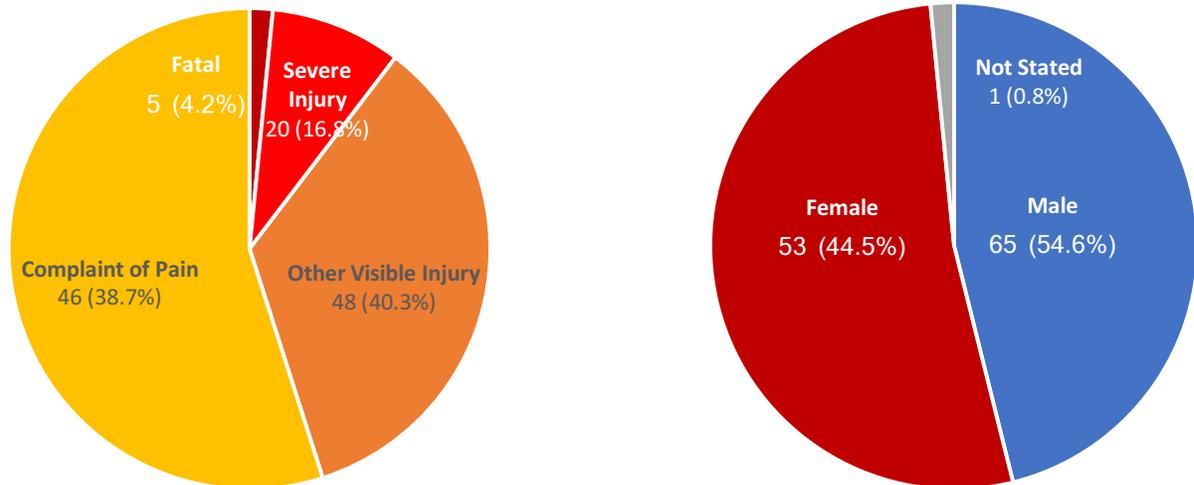
### Pedestrian Victim Demographics

The age of pedestrian victims ranged considerably across all age groups, with youth age 19 or younger accounting for 15.9 percent of all victims. Victims were equally split between genders.



### Victim Injury Severity, 2011-15

Most collisions resulted in minor injuries.



\* Data Source: California Statewide Integrated Traffic Records System (SWITRS). Collision data for 2014 and 2015 are provisional at this time.

# Community Pedestrian and Bicyclist Safety Workshop – San Gabriel, CA – 09/25/17

## Pedestrian and Bicycle Collision Analyses, 2006-15\*

### BICYCLISTS

#### Number of Collisions Involving Bicyclists, 2006-2015



The **blue** line shows the number of bicycle collisions where a fatality and/or injury occurred. There were 215 people killed or injured in 209 bicycle collisions over the last 10 years.

The **green** line shows the three-year moving average of the number of bicycle collisions where a fatality and/or injury occurred. The moving average is useful for tracking trend change over time, especially when the number of collisions is subject to variability.

The following analyses are based on the most current five years, 2011 to 2015, of data for San Gabriel, CA. There were 123 people injured in 119 bicycle collisions.

#### Top Violation Types for Collisions Involving Bicycles

| Type of Violation         | Collisions N(%)     |
|---------------------------|---------------------|
| Wrong side of road        | 38 (31.9%)          |
| Other Violations          | 28 (24.6%)          |
| Automobile right of way   | 24 (20.2%)          |
| Improper turning          | 14 (11.8%)          |
| Traffic signals and signs | 10 (8.4%)           |
| Not stated/Unknown        | 5 (4.2%)            |
| <b>Total</b>              | <b>119 (100.0%)</b> |

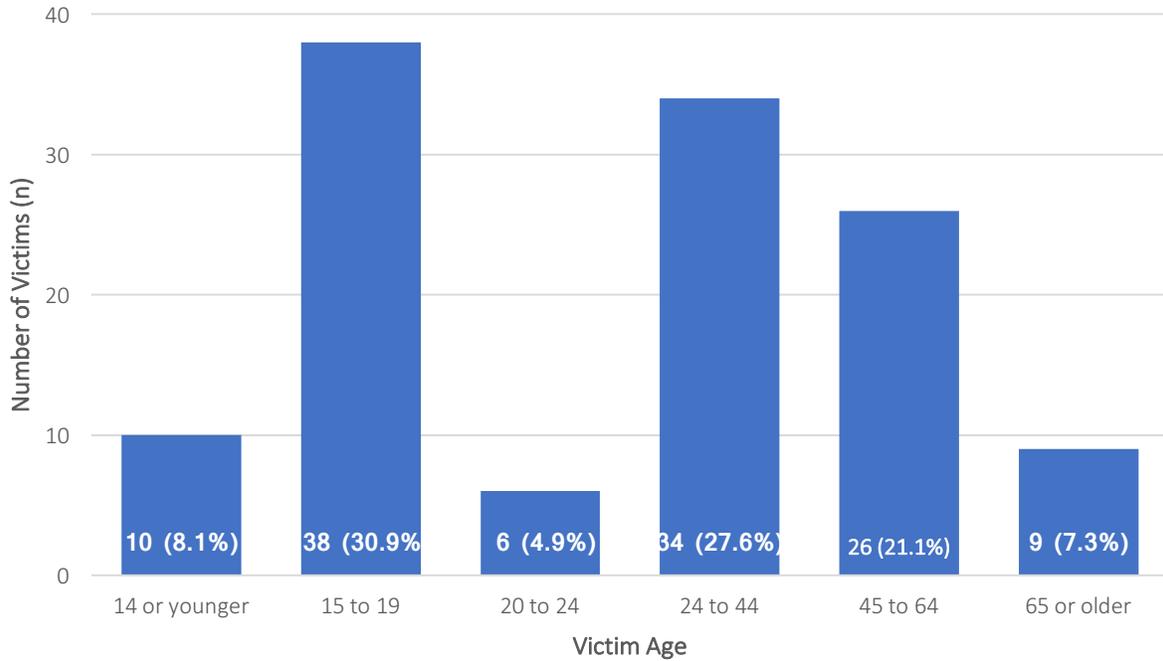
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# Community Pedestrian and Bicyclist Safety Workshop – San Gabriel, CA – 09/25/17

## Pedestrian and Bicycle Collision Analyses, 2006-15\*

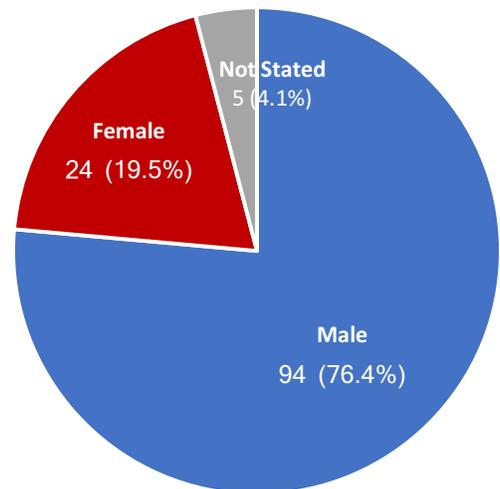
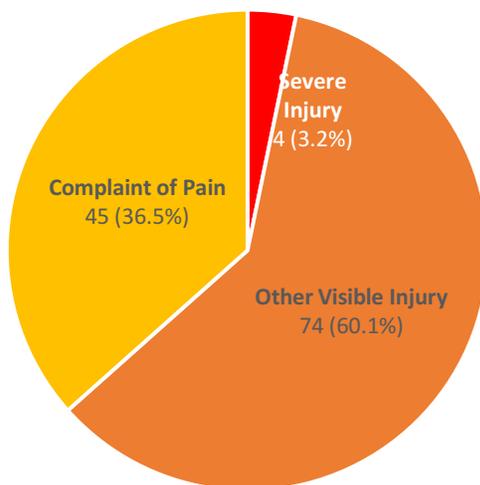
### Bicycling Victims Demographics

The age of bicycling collision victims varied across all age groups, with youth age 19 or younger accounting for 39 percent of victims. The majority of victims were male.



### Victim Injury Severity, 2011-15

Most collisions resulted in minor injuries.



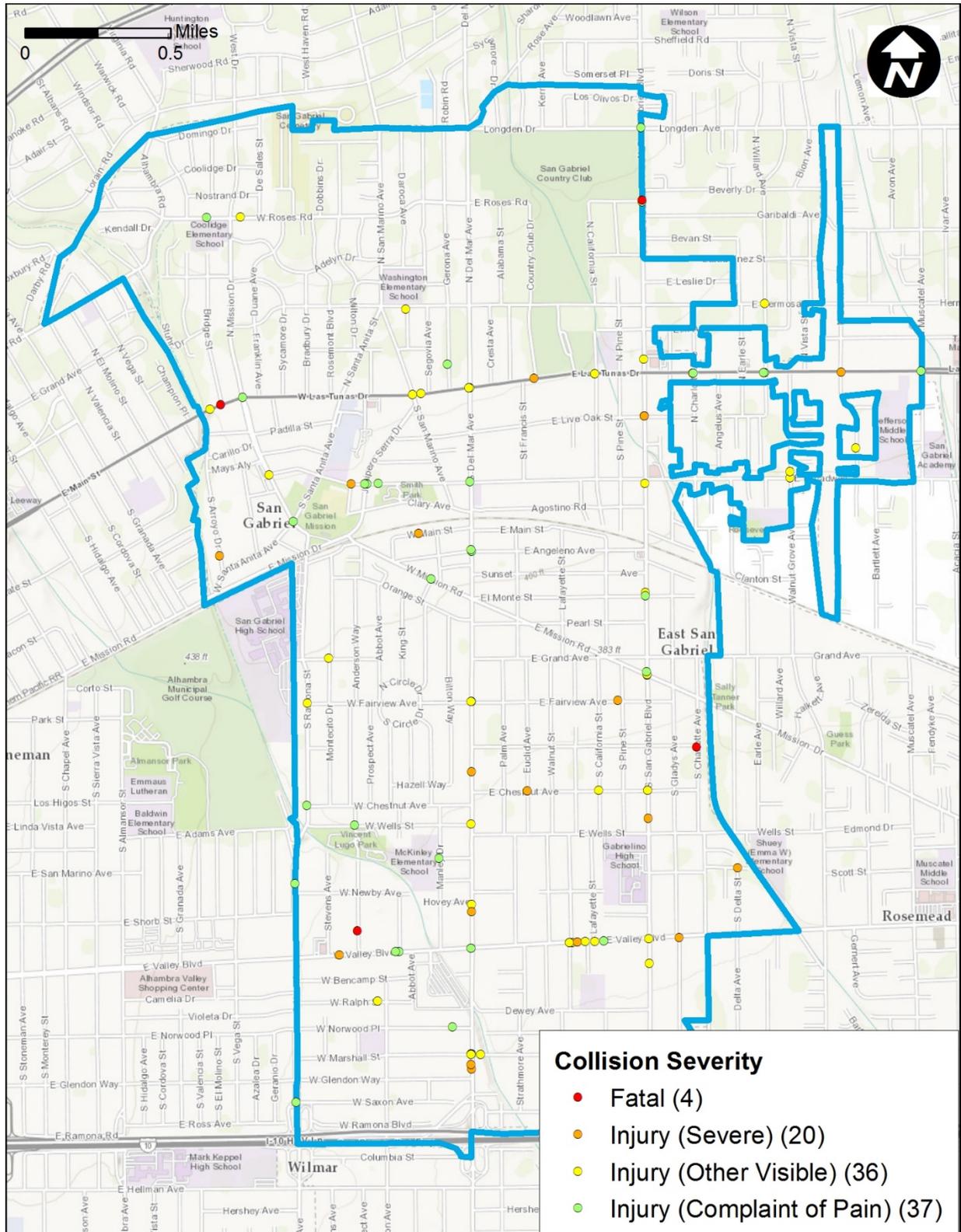
\* Data Source: California Statewide Integrated Traffic Records System (SWITRS). Collision data for 2014 and 2015 are provisional at this time.

# Community Pedestrian and Bicyclist Safety Workshop – San Gabriel, CA – 09/25/17

## Pedestrian and Bicycle Collision Analyses, 2006-15\*

### Pedestrian Collision Locations, 2011-15

Note: Only 97 of 104 collisions are geo-coded.



\* Data Source: California Statewide Integrated Traffic Records System (SWITRS). Collision data for 2014 and 2015 are provisional at this time.

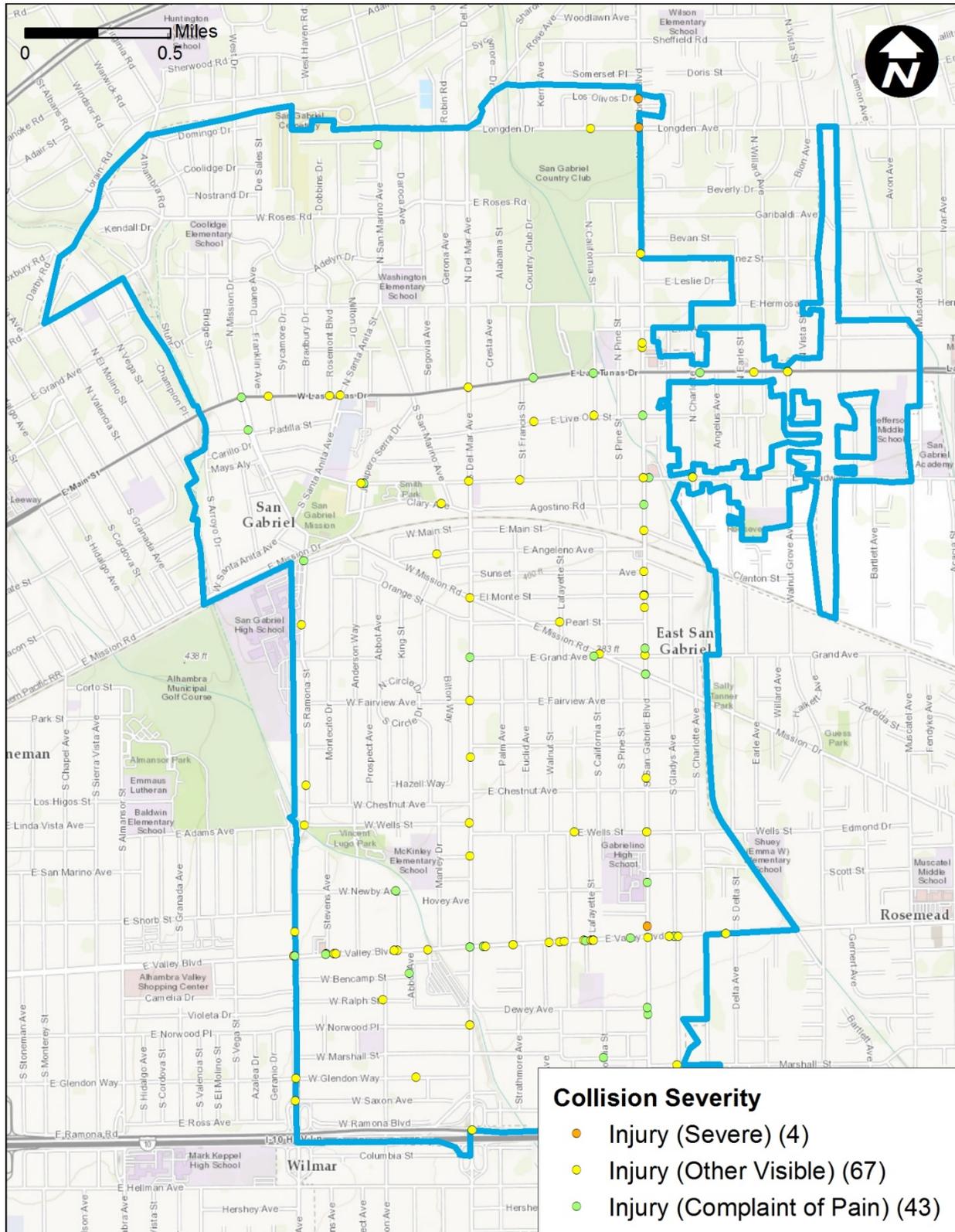
Funding for this project was provided by a grant from the California Office of Traffic Safety through the National Highway Traffic Safety Administration.

# Community Pedestrian and Bicyclist Safety Workshop – San Gabriel, CA – 09/25/17

## Pedestrian and Bicycle Collision Analyses, 2006-15\*

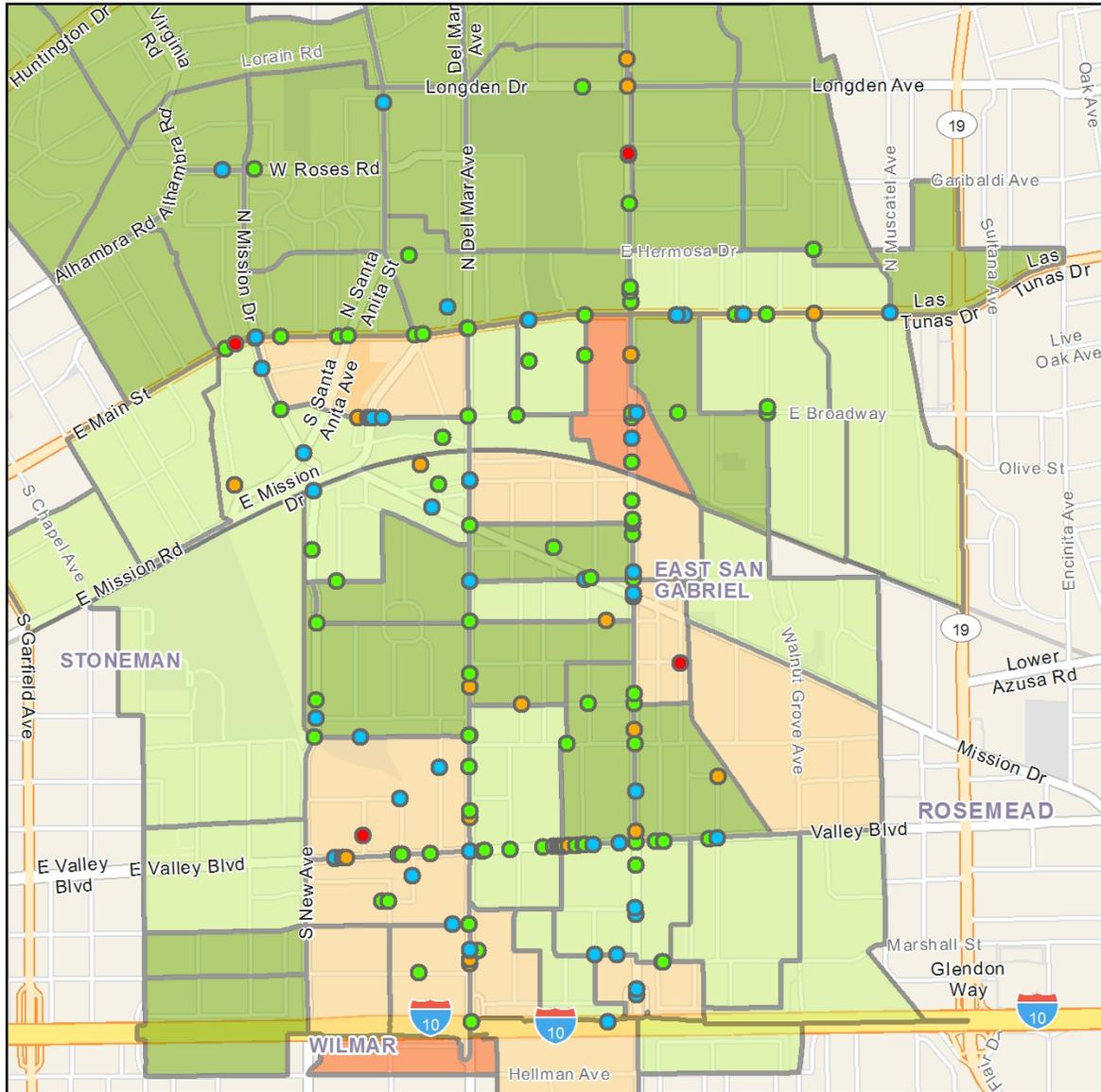
### Bicycling Collision Locations, 2011-15

Note : Only 114 of 119 collisions are geo-coded.



\* Data Source: California Statewide Integrated Traffic Records System (SWITRS). Collision data for 2014 and 2015 are provisional at this time.

# San Gabriel Bicycle/Pedestrian Collision Map (2011 - 2015)



## Collision Severity (2011-2015)

- Fatal (4)
- Injury (Severe) (23)
- Injury (Other Visible) (96)
- Injury (Complaint of Pain) (78)

## 2016 Median Household Income

- < 35K
- 35K - 50K
- 50K - 75K
- > 75K